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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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07/930,404 09/14/92 KAMIGUCHI

D3M1/0818

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M	392-1290/JDH
EXAMINER	
HEITBRINK, J	

ART UNIT	PAPER NUMBER
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1307
DATE MAILED:

08/18/93

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☒ Responsive to communication filed on 8-6-93 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-6 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 1-6 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed on _____, has been ☐ approved. ☐ disapproved (see explanation).
12. ☐ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to adequately teach how to make and/or use the invention, i.e. failing to provide an enabling disclosure.

The specification does not teach how to determine any of the points on the pressure waveform or the third point and how to determine whether a straight or arcuate waveform would be chosen.

Claims 1-6 are rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the specification.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3 are rejected under 35 U.S.C. § 103 as being unpatentable over Japanese Kokai 61-197218 taken together with Japanese Kokai 61-154820.

The Japanese Kokai '218 discloses storing optimum pressure waveforms in memory and using the waveform as a target pressure. The Japanese Kokai '820 teaches using a set value set by a pressure setting device as a target for feedback control. It would have

been obvious to use the target pressure waveform in the Japanese Kokai '218 as a feed back control pressure in view of the teaching of Japanese Kokai '820 so as to operate the injection molding machine at the waveform pressures for optimum moldings. The operating of the injection molding machine during trial injection and adjusting molding condition to obtain the target waveform would have been obvious because Japanese Kokai '218 adjusts pressure, speed and temperature so as to obtain the target waveform in the following molding operation.

Claims 4-6 are rejected under 35 U.S.C. § 103 as being unpatentable over German Offenlegungsschrift 2,916,782.

The German patent discloses storing, displaying and correcting a pressure waveform using a light pencil. It would have been obvious to a person of ordinary skill in the art that the correction in the German patent would form a straight or arcuate line between two points on the waveform since this would correct a portion of the waveform.

Applicant's arguments filed August 6, 1993 have been fully considered but they are not deemed to be persuasive.

Applicant argues that the determination of the specific points of a pressure waveform or the determination of whether a straight or curved waveform should be chosen to modify an injection pressure waveform, are not relevant to the claimed invention of a method or machine for modifying an injection pressure waveform for an

injection/dwell stage of an injection molding machine. The examiner disagrees because a person of ordinary skill in the art would not be capable of using the invention unless the information on how to determine the specific points and the type of waveform is provided. As to providing a capability to modify the injection pressure waveform, such a capability would not be enabling unless the specific points and type of waveform is determined.

Applicant argues that the combination of JP'218 and JP'820 do not teach a method wherein the molding conditions can be adjusted and used to obtain an injection pressure waveform as a function of time by detecting a pressure acting on the resin during the injection/dwell stage, and by setting this detected injection pressure waveform as a target injection pressure waveform for feedback control in the injection dwell stage. However, the waveform in JP'218 teaches the adjusting of the molding conditions since optimum pressure waveforms (plural) are being determined and each waveform would have a different adjusted molding condition.

Applicant argues that the pressure waveform in claims 4-6 is determined by interpolation rather than a operator tracing a line. However, the claims read on a operator interpolating a straight or curved line between points.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL.** See M.P.E.P.

Serial No. 930,404

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Art Unit 1307

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill L. Heitbrink whose telephone number is (703) 308-0673.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.



JILL L. HEITBRINK
PRIMARY EXAMINER
ART UNIT 137

J. Heitbrink
August 16, 1993